

REMARKS

To further the prosecution of this application, Applicants have amended the specification, amended claims, canceled claims, and added claims. Further to this Amendment, claims 1-28, 30-41, and 43-76 are presented for examination. Each of claims 1, 13, 24, 28, 31, 32, 33, 41, 49, and 50 is in independent form. For the reasons stated below, each of the claims presented herein distinguishes patentably over the cited references.

Claims 1-12 and 51-55

Claim 1 stands rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,236,674 (Morelli). Applicants traverse.

Claim 1 is directed to a method for implementing two-way communication between at least first and second devices. During finite periods following transmission of respective first messages from the first device to the second device, the first device is used to listen for second messages transmitted from the second device to the first device. After each of the finite time periods following the transmission of the respective first messages, the first device ceases to listen for second messages transmitted from the second device to the first device until after the first device transmits another first message to the second device. In addition, the second device ceases to listen for first messages received from the first device at least occasionally when the second device is operational.

Morelli

Morelli is directed to a mobile terminal that includes a transceiver having a sleep mode of operation. In particular, circuitry is provided that causes a receiver in the device to “wake up” when a received signal strength indicator (RSSI) indicates that a received signal above a particular threshold has been detected. In addition, when an incoming signal requiring a response is detected, a transmitter in the mobile terminal is immediately “woken up” so as to enable the prompt transmission of an appropriate response, without waiting for the entire incoming signal to have been received before beginning the process of “waking up” the transmitter. The Morelli device thus effectively “listens” for incoming signals at all times.

Morelli does not disclose or suggest that the described device could or should be used to listen for incoming messages during finite periods following transmission of outgoing messages,

and that, after such finite periods, to cease listening for incoming messages until after another outgoing message has been transmitted.

In other words, claim 1 recites a method in which a first device “listens” for incoming messages only after it “speaks.” The system of Morelli, by contrast, “listens” for incoming messages at all times, and selectively “speaks” after receiving each incoming message.

Claim 1 thus distinguishes patentably over Morelli.

U.S. Patent No. 5,479,411 (Tymes)

Limitation (a3) has been added to claim 1 to further distinguish it over Tymes, which was cited in the IDS filed on March 3, 2003.

Tymes discloses remote units in a communication system that “listen” only after they “speak.” The devices with which the remote units communicate, however, are “base stations” which, according to the specification, require their transceivers to be “activated at all times.” (See col. 13, line 62 – col. 14, line 5). By contrast, in the claimed system, the second device at least occasionally ceases to listen for messages received from the first device, and thus enables the second device to conserve power during such time periods. This feature is clearly not disclosed or suggested by Tymes.

Claim 1 thus distinguishes patentably over each of Morelli and Tymes, and the rejection of claim 1 should be withdrawn.

Each of claims 2-12, and 51-55, being dependent on claim 1, distinguishes patentably over the cited references for at least the same reasons.

Claims 13-23 and 56-60

Claim 13 stands rejected under 35 U.S.C. §102(b) as being anticipated by Morelli.
Applicants traverse.

Claim 13 is directed to a method for implementing two-way communication between at least first and second devices. During finite periods following reception by the second device of respective first messages from the first device, the second device is used to transmit second messages to the first device. After each of the finite periods following reception by the second device of respective first messages from the first device, the second device ceases to transmit second messages to the first device until after the second device receives another first message

from the first device. In addition, the second device ceases to listen for first messages received from the first device at least occasionally when the second device is operational.

Morelli

As discussed above, Morelli discloses a mobile terminal that includes a transceiver having a sleep mode of operation. The transceiver “wakes up” after it detects the presence of an incoming signal, and selectively transmits a response. Morelli does not disclose or suggest, however, that after the mobile terminal has transmitted a response to the device that sent it an incoming message, that it ceases to transmit any further messages to the other device until after another message has been received from that device. Rather, in the Morelli system, it would appear that the transceiver can be used at any time to communicate with any other device in the network. In other words, although Morelli discloses a mobile terminal in which a transmitter can be selectively activated to promptly transmit a response to an incoming message, there is no disclosure or suggestion that there are any limitations on other uses of the transmitter to communicate with other devices in the network.

In any event, as noted above, the Morelli device effectively “listens” for incoming messages at all times, and never ceases to listen for incoming messages at any time when it is operational, as required by limitation (a3) of claim 13. Thus, claim 13, as amended, clearly distinguishes patentably over Morelli.

Tymes

The addition of limitation (a3) to claim 13 also further distinguishes claim 13 over Tymes (discussed above). Although the base stations in Tymes do transmit responsive messages to remote units after receiving incoming messages from those units, Tymes explicitly teaches that the base stations must listen for incoming messages at all times. The Tymes system thus does not disclose or suggest limitation (a3) of claim 13, which requires that the second device cease listening for first messages received from the first device at least occasionally when the second device is operational.

Claim 13 thus distinguishes patentably over this reference as well.

Each of claims 14-23 and 56-60 distinguishes patentably over the cited references for at least the same reasons.

Claims 24-27 and 61-63

Claim 24 stands rejected under 35 U.S.C. §102(b) as being anticipated by Morelli.

Applicants traverse.

Claim 24 is directed to a system including at least first and second devices capable of engaging in two-way communication. The first device comprises a first transmitter, a first receiver, and at least one first controller coupled to the first transmitter and the first receiver. The at least one first controller is configured to power on the first receiver to listen for second messages from the second device during finite time periods following use of the first transmitter to transmit respective first messages to the second device. The at least one first controller is further configured to power down the first receiver after each of the finite time periods following use of the first transmitter to transmit respective first messages to the second device. The second device comprises a second transmitter, a second receiver, and at least one second controller coupled to the second transmitter and the second receiver. The at least one second controller is configured to power down the second receiver at least occasionally during operation of the second device.

Morelli

As discussed above in connection with claim 1, Morelli does not disclose or suggest a device in which a receiver is powered on to listen for incoming messages during finite time periods following its transmission of outgoing messages, and is thereafter powered off. Rather, in Morelli, the transceiver is powered on in response to the detection of an incoming signal that exceeds a particular threshold strength.

Accordingly, claim 24 distinguishes patentably over Morelli, and the rejection of claim 24 based upon that reference should be withdrawn.

Tymes

As amended, claim 24 also distinguishes patentably over Tymes, because (as noted above), the receivers in the base stations of the Tymes system are powered on at all times, and are not powered down at least occasionally during operation, as now required by claim 24.

Each of claims 25-27 and 61-63, being dependent on claim 24, distinguishes patentably over the cited references for at least the same reasons.

Claims 28, 30 and 64-67

Claim 28 stands rejected under 35 U.S.C. §102(b) as being anticipated by Morelli.
Applicants traverse.

Claim 28 is directed to a system capable of engaging in two-way communication. The system includes a first device comprising a first transmitter, a first receiver, and at least one first controller coupled to the first transmitter and the first receiver. The system further includes a second device comprising a second transmitter, a second receiver, and at least one second controller coupled to the second transmitter and the second receiver. The second controller is configured to power on the second transmitter to transmit second messages to the first device during finite periods following reception by the second receiver of respective first messages from the first device. The second controller is further configured such that, after transmission of each of the second messages from the second device to the first device, the second transmitter is powered down and is not thereafter used to transmit any additional messages to the first device until after the second receiver receives another first message from the first device.

Morelli

As noted above in connection with claim 13, Morelli does not teach or suggest that after its transmitter has been used to transmit a response to an incoming message, that it should then be powered down and not thereafter used to transmit any additional messages to the device from which it received the incoming message until after it has received another message from that device. Instead, the Morelli device appears to be capable of employing its transmitter to communicate with any device it chooses at any time it chooses. By contrast, the second transmitter of claim 28 communicates with the first device only after it has received an incoming message from the first device.

Claim 28 therefore distinguishes patentably over Morelli, and the rejection of claim 28 based on that reference should be withdrawn.

Tymes

Claim 28, as amended, also distinguishes patentably over Tymes because there is no teaching or suggestion in Tymes that the disclosed base station transceivers should ever be powered down. On the contrary, Tymes explicitly teaches that its transceiver 34 must be activated at all times. (See col. 13, line 62 – col. 14, line 14).

Each of claims 30 and 64-67, being dependent on claim 28, distinguishes patentably over the cited references for at least the same reasons.

Claim 31

Claim 31 stands rejected under 35 U.S.C. §102(b) as being anticipated by Morelli. Applicants traverse.

Claim 31 is directed to a system comprising means for using a first device to listen for second messages transmitted from a second device to the first device during finite time periods following transmission of respective first messages from the first device to the second device. The system further comprises means for, after each of the finite periods following the transmission of the respective first messages from the first device to the second device, ceasing to use first device to listen for second messages transmitted from the second device to the first device until after the first device transmits another first message to the second device. In addition, the system includes means for ceasing to use the second device to listen for messages transmitted from the first device to the second device at least occasionally during operation of the second device.

As discussed above in connection with claim 1, neither Morelli nor Tymes discloses or suggests a system in which one or more components perform the functions recited in this claim. Accordingly, the rejection of claim 31 should be withdrawn.

Claim 32

Claim 32 stands rejected under 35 U.S.C. §102(b) as being anticipated by Morelli. Applicants traverse.

Claim 32 is directed to a system comprising means for using a second device to transmit second messages to a first device during finite time periods following reception by the second device of respective first messages from the first device. The system further comprises means for, after each of the finite time periods following reception by the second device of respective first messages from the first device, ceasing to use the second device to transmit second messages to the first device until after the second device receives another first message from the first device. In addition, the system includes means for ceasing to use the second device to listen

for messages transmitted from the first device to the second device at least occasionally during operation of the second device.

As discussed above in connection with claim 13, neither Morelli nor Tymes discloses or suggests a system in which one or more components perform the functions recited in this claim. Accordingly, the rejection of claim 32 should be withdrawn.

Claims 33-40 and 68-71

Claim 33 stands rejected under 35 U.S.C. §102(b) as being anticipated by Morelli. Applicants traverse.

Claim 33 is directed to a method for implementing two-way communication between at least first and second devices. During finite time periods following transmission of respective first messages from the first device to the second device, a receiver included in the first device is powered on to listen for second messages transmitted from the second device to first device. After each of the finite time periods following the transmission of the respective first messages from the first device to the second device, the receiver included in the first device is powered down. In addition, a receiver included in the second device is powered down at least occasionally when the second device is operational.

As discussed above in connection with claim 24, neither Morelli nor Tymes discloses or suggests a system in which a receiver included in one device is powered on to listen for incoming messages during finite time periods following the transmission of outgoing messages, and in which a receiver included in another device is powered down at least occasionally when that device is operational.

Accordingly, claim 33 distinguishes patentably over the cited references, and the rejection of that claim should be withdrawn.

Each of claims 34-40 and 68-71, being dependent on claim 33, distinguishes patentably over the cited references for at least the same reasons.

Claims 41, 43-48 and 72-76

Claim 41 stands rejected under 35 U.S.C. §102(b) as being anticipated by Morelli. Applicants traverse.

Claim 41 is directed to a method for implementing two-way communication between at least first and second devices. During finite time periods following reception by the second device of respective first messages from the first device, when the second device needs to communicate with the first device, a transmitter included in the second device is powered on to transmit second messages to the first device. After transmission of each of the second messages from the second device to the first device, the transmitter included in the second device is powered down and is not thereafter used to transmit any additional messages to the first device until after the second device receives another first message from the first device.

As discussed above in connection with claim 28, neither Morelli nor Tymes discloses or suggests a system in which a one device is used to transmit messages to another device only after an incoming message has been received from that device.

Accordingly, claim 41 distinguishes patentably over the cited references, and the rejection of that claim should be withdrawn.

Each of claims 43-48 and 72-76, being dependent on claim 41, distinguishes patentably over the cited references for at least the same reasons.

Claim 49

Claim 49 stands rejected under 35 U.S.C. §102(b) as being anticipated by Morelli. Applicants traverse.

Claim 49 is directed to a system comprising means for powering on a receiver included in a first device to listen for second messages transmitted from a second device to first device during finite time periods following transmission of respective first messages from the first device to the second device. The system also comprises means for, after each of the finite time periods following the transmission of the respective first messages from the first device to the second device, powering down the receiver included in the first device. In addition, the system comprises means for powering down a receiver included in the second device at least occasionally when the second device is operational.

As discussed above in connection with claim 33, neither Morelli nor Tymes discloses or

suggests a system in which one or more components perform the functions recited in this claim.

Accordingly, claim 49 distinguishes patentably over the cited references, and the rejection should be withdrawn.

Claim 50

Claim 50 stands rejected under 35 U.S.C. §102(b) as being anticipated by Morelli. Applicants traverse.

Claim 50 is directed to a system comprising means for, when a second device needs to communicate with a first device, powering on a transmitter included in the second device to transmit second messages to the first device during finite time periods following reception by the second device of respective first messages from the first device. In addition, the system comprises means for, after transmission of the second messages from the second device to the first device, powering down the transmitter included in the second device, and thereafter ceasing to use the second device to transmit any additional messages to the first device until after the second device receives another first message from the first device.

As discussed above in connection with claim 41, neither Morelli nor Tymes discloses or suggests a system in which one or more components perform the functions recited in this claim.

Accordingly, claim 50 distinguishes patentably over the cited references, and the rejection should be withdrawn.

CONCLUSION

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,
Ohlenbusch et al., Applicants

By: 

Robert M. Abrahamsen, Reg. No. 40,886
Wolf, Greenfield & Sacks, P.C.
600 Atlantic Avenue
Boston, Massachusetts 02210-2206
Telephone: (617) 646-8000

Docket No.: P0663.70015US00
Date: March 3, 2005
x02/03/05x